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INSTITUTE OF SOCIAL
MEDICINE

10, PARKS ROAD,
OXFORD

JOINT COUNTY COUNCIL OF MORAY & NAIRN

REPORT

by

The Medical Officer of Health

for

1948.

County Buildings,
Elgin.
25th November, 1949.

To

The Joint County Council of Moray and Nairn,
The Moray County Council,
The Nairnshire County Council,
The Town Councils of Burghead,
Elgin,
Forres,
Grantown-on-Spey,
Lossiemouth,
Nairn,
Rothes.

My Lords, Ladies and Gentlemen,

I have the honour to present my Annual Report for the year ending 31st December, 1948.

The main event of the year 1948 was the commencement of the National Health Service on 5th July. As regards the local authorities, the effects of this and other welfare legislation has been, in general, to relieve them of responsibilities for medical treatment, but has been also to place more firmly upon their shoulders the duties in preventive medicine which they already carried, and to add to them duties concerned with minimising the effects of sickness and the economic loss it entails.

At the time of writing, it is apparent that the first year of the National Health Service has been vastly more costly than was expected, and in fact it has served to demonstrate that an efficient preventive branch is not merely desirable but fundamentally essential to the success of the Service as a whole.

The awakening of public interest in preventive medicine was signalised about 100 years ago by the appointment of the first Medical Officers of Health. At that time, the devastating epidemics of infectious disease of the mid Nineteenth Century were at their height, and presented the obvious field for the first efforts of the new departments. In the succeeding 100 years, the success has been striking. Smallpox, typhus, cholera and enteric have been virtually banished. With a little more effort diphtheria will follow them. The methods by which this result has been achieved have varied except in their fundamental conception which is to find a weak point in the disease cycle and to attack it.

In the body of the report I have made an estimate of the saving effected since diphtheria immunisation was introduced. I would point out that sums of money representing the saving effected by banishing these other diseases could also be calculated, and that, therefore, it is in the interests of the community to foster its preventive services, if only for the financial saving involved.

The position with regard to infectious diseases is, therefore, that a defensive front has been established against certain of them, and, so long as this front is maintained, there will be no invasion. This defensive front does not represent a barrier against other diseases. Fortunately, however, many of the other diseases cause little harm. Some, however, do, and research is continually going on to ascertain the weak points for/

for attack. It is, therefore, necessary to hold the position reached and to be prepared to add to its defences. There can be no relaxation of precautions, and this applies most particularly in connection with diphtheria.

I have already indicated that preventive medicine is not limited in its application to the infectious diseases. The need of preventive measures in connection with the reduction of maternal and infant mortality has been repeatedly emphasised, and the fall in these over the country as a whole during the last few years has demonstrated not only the efficacy of the measures taken, but the need to prosecute them energetically. The fact that Moray and Nairn is not in the van of progress in this connection must cause some perturbation.

In the supervision of children at school there is another fruitful field for preventive measures. The method here is to ascertain the causes of defect in individuals and to secure their remedy. The result is a substantial saving in hours of education, otherwise lost, and a substantial increase in the physical efficiency of the pupil during those hours of education. The sum total is a healthier and better educated child at the time of leaving school.

Preventive medicine has already entered the industrial field quite extensively, mainly perhaps in the prevention of accidents. In this connection, the word "accident" has come to have a meaning rather different from what it had a few years ago. Physical violence is an obvious cause of accident. Tuberculosis through unsatisfactory working conditions is now accepted as an accident, although there is no visible violence. There is no reason why the field of industrial medicine should have a monopoly in this matter. Accidents occur wherever mankind congregates. Accidents are likewise largely preventable and there is a great field for the Local Health Authority in trying to ascertain why these accidents occur, with a view to ascertaining how they may be prevented.

The environmental services are not overlooked. Here, the problem is to ensure clean food, safe milk, pure water, good houses, and innocuous refuse disposal. The need for the first three and the last is obvious. If they are unclean, unsafe, impure or noxious, there is an immediate gap in the defensive front against serious infectious disease. Good housing is of particular importance in the prevention of respiratory disease. In the case of pulmonary tuberculosis, it is probable that good housing for the affected family will do more towards the control of the disease than any other single measure.

I have the honour to be,

Yours faithfully,

Medical Officer of Health

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VITAL STATISTICS.

Population.

Estimate at middle of 1948 56,070
(This is an increase of 1,296 on the previous year, and of 6,923 on the year 1938).

Births, Deaths and Marriages.

Total live births, corrected for transfer	1,130	20.2 per 1,000 population
Legitimate	1,016	89.9 % total live births
Illegitimate	114	10.1 % total live births
Total still-births corrected for transfer	28	24.2 per 1,000 total births
Marriages	466	8.3 per 1,000 population
Deaths, all causes, corrected for transfer	658	11.7 per 1,000 population
Tuberculosis (all forms)	19	33.9 per 100,000 population
" (respiratory)	17	30.3 per 100,000 population
Principal epidemic diseases	4	7.1 per 100,000 population
Children under one year	56	49.6 per 1,000 live births
Women in childbirth	1	0.9 per 1,000 total births

Causes of Death.

There is a small decline in deaths from tuberculosis.

Deaths from infectious disease show a decline.

The communicable respiratory diseases continue to show a reduction of about 30% over the pre-War figure.

Deaths from cancer and other malignant diseases, which in 1947 showed a decline, have risen above the average.

Deaths from diseases of heart and arteries and to nephritis remain responsible for nearly half of all deaths.

Age Incidence of Deaths.

0 – 1	1 – 4	5 – 9	10 – 14	15 – 24	25 – 34	35 – 44	45 – 54	55 – 64	65 – 74	75 – 84	85 +
56	7	2	4	22	17	22	46	87	151	175	69

CARE OF MOTHERS AND YOUNG CHILDREN.

(a) Ante-natal and Post-natal Clinics.

The Local Health Authority provide none. For some years, Clinics have been held by the obstetrical and gynaecological specialists at Leanchoil Hospital, Forres, and the Town and County Hospital, Nairn.

	Ante-natal	Post-natal
Total number of women who attended during 1948.	119	10

(b) Child Welfare Clinics.

The Local Health Authority have continued the Child Welfare Clinic in Elgin. During 1948, the attendances were as follows:-

	Under 1 year	Over 1 year
Children attending.	141	11
Total attendances.	988	89

(c) Dental Care.

Owing to the lack of dental staff, no arrangements could be made in 1948 for the dental care of expectant or nursing mothers, or of pre-school children.

(d) Mother and Baby Homes.

The Local Health Authority provide no homes for mothers and babies, and so far none have been provided by voluntary organisations within the area of the Combined County.

(e) Day Nurseries.

There are no day nurseries in Moray and Nairn.

(f) Residential Nurseries and Children's Homes.

There are so far no residential nurseries or children's homes in Moray and Nairn.

(g) Nurseries and Child-Minders Regulation Act, 1948.

No day nurseries and child-minders have been registered. There is little scope for either in a rural and non-industrial area such as this.

MIDWIFERY SERVICES.

	Before 5:7:48	Remainder of Year	Total
(a) Total number of Births notified, including still-births (uncorrected)	595	478	1,073
(b) Births according to classification			
(i) Under the Maternity Services (Scotland) Act, 1937	158	-	158
(ii) Under Section 23 (2) of the National Health Service (Scotland) Act, 1947			
Doctor engaged and present	-	150	150
Doctor engaged and not present	-	55	55
No doctor engaged	-	-	-
(iii) Other domiciliary cases	44		44
(iv) Cases attended in institutions in Moray and Nairn	666		666
			1,073

VISITATION BY HEALTH VISITORS DURING 1948.

	Initial Visits	Total Visits
Expectant mothers visited by Health Visitors	388	2,525
Infants	961	11,355
Children (1 - 5 yrs.)	426	8,485
School children		
Visits at the request of the family doctor	320	1,777
Visits at the request of the hospital	30	172

HOME NURSING.

Cases attended in their homes by nurses carrying out arrangements under Section 25 of the National Health Service (Scotland) Act from 5:7:48 to 31:12:48.	1,426	20,174

DOMESTIC HELP.

The Local Health Authority have made no scheme for the provision of domestic help.

INFANT MORTALITY AND STILL-BIRTHS.

The principal statistical findings are presented in the series of tables following.

Births, Still-births and Infant Deaths, by Totals and Rates, 1931 to 1948.

	Average 1931 to 1940	1941	1942	1943	1944	1945	1946	1947	1948
Live Births	886	1085	1104	1048	1057	953	1122	1210	1130
Still-births	-	26	41	32	39	25	40	36	28
Total Births	-	1111	1145	1080	1096	978	1162	1246	1158
Deaths under one year	60	79	56	49	59	50	55	59	56
Birth Rate	18.1	20.7	21.3	20.5	21.3	19.2	21.6	22.1	20.2
Still-birth Rate	-	23.4	35.8	29.6	35.6	25.6	34.4	28.9	24.2
Infant Mortality Rate	67.7	72.8	50.7	46.7	55.8	52.5	49.0	48.8	49.6

Causes of Infant Mortality, 1948, corrected for Residence.

	In first 4 weeks.	In remainder of first year	Total
Premature Birth	23	-	23
Congenital Debility	1	1	2
Congenital Malformation	6	4	10
Injury at Birth	2	-	2
Respiratory Disease	-	8	8
Alimentary Disease	2	4	6
Other Causes	-	5	5
TOTAL	34	22	56

Causes of Still-birth, 1948, not corrected for Residence.

Difficult Labour	7
Congenital Malformation	7
Ante-partum Haemorrhage	2
Acute Toxaemia	2
Chronic Disease of the Mother	-
Other Causes	4
Total	22

These tables show the following:-

Births in the years from 1941 onwards have increased by nearly one quarter over the pre-war decade.

Still-births show the same degree of prevalence throughout the period from 1941 onwards. Owing to absence of compulsory notifications, no comparison can be made with the previous decade.

Infant Deaths are slightly fewer in number than in the previous decade. The rise in the number of births has the effect of making infant deaths relatively less frequent.

The rates for Scotland for 1948, as given in the preliminary return for 1948 are as follows:-

Birth rate	18.5
Infant mortality rate	44.
Still-birth rate	29.

That is to say, in Moray and Nairn, in the year 1948, the birth rate, and the infant mortality rate were higher than the national average, and the still-birth rate was lower.

An examination of the comparative figures for the separate counties of Moray and Nairn shows that in the latter, the birth rate tends to be lower, the infant mortality higher, and the still-birth rate lower.

	MORAY				NAIRN			
		Average				Average		
	Popln	Birth rate	Infant M. rate	S-B rate	Popln.	Birth rate	Infant M. rate	S-B rate
1935 to 1939	40,980	17.5	66	-	8,283	17.2	58	-
1940 to 1944	42,594	19.1	59	32	8,438	18.0	73	27
1945	41,424	17.5	52	26	8,241	18.1	55	24
1946	43,431	21.3	53	37	8,619	19.0	24	18
1947	45,785	22.2	47	30	8,989	21.4	57	25
1948	46,867	20.5	48	25	9,203	18.4	59	17

There is ample room for improvement. An infant mortality rate of 20 per 1,000 live births is a practical possibility, as is a still-birth rate of 12 per 1,000 total births.

For some time past, it has been apparent that cases dealt with under the Maternity Services Scheme showed favourable trends in respect of maternal mortality, infant mortality, and still-births. The scheme ceased to operate with the inception of the National Health Service in July, 1948, and an analysis of results has been made.

Total births under the Moray and Nairn Scheme	1,548
Maternal deaths	1
Maternal mortality rate per 1,000 total births	0.67
Infant deaths	58
Infant mortality rate per 1,000 live births	39
Still-births	35
Still-birth rate per 1,000 total births	23

The original purpose of the Maternity Services (Scotland) Act, 1937, was to reduce maternal mortality. In the series of cases treated in Moray and Nairn it has been successful. In addition, over a period of seven years the infant mortality and still-birth rates have been very substanitally lower than the average for the community. Attention has already been drawn to the need for reducing the wastage by still-births and infant deaths, and a scheme such as the Maternity Services Scheme seems to point the way to its achievement. The essential factors were as follows:-

1. Overall supervision by the health authority.
2. A team of midwife, doctor, specialist and hospital as the executive agent.

In practice, the scheme was patronised by the less well off sections of the community, sections which in general show more unfavourable rates for infant mortality and still-births than the better off grades. The triumph of the Maternity Services Scheme is therefore greater than shown by the figures.

VACCINATION AND IMMUNISATION.

Vaccination against Smallpox.

Vaccinations notified for the period 5:7:48 to 31:12:48.

	Primary	Secondary
Typical Vaccinia (7-10 days)	71	5
Accelerated Reaction (5-7 days)	5	-
Reaction of Immunity (2-3 days)	-	-
No Local Reaction	3	3

Immunisation against Diphtheria.

Immunisations carried out in 1948.

Year of Birth	Primary	Reinforcement
1948	9	-
1947	526	-
1946	88	-
1945	28	-
1944	9	-
1943	8	10
1942	17	325
1941	8	383
1940	-	7
1939	-	2
1938	1	-
1937	-	-
1936	1	-
1935	-	-
1934	-	-
1933	-	-
1932 or earlier	1	-
	696	727

It is gratifying to find that over 80% of school entrants have been previously immunised. Arrangements are made to offer reinforcing doses to all these children and to urge immunisation in the 20% unprotected.

Administratively, the schemes in connection with vaccination and immunisation are unified, and the main features are as follows:-

1. From birth notifications and other sources of information, card indexes of those due to be vaccinated and immunised, month by month, are compiled.

2. In the child's fourth month of life, reminders are sent to the parent, and to the doctor, that vaccination is now due.

3. In the child's eighth month of life, similar reminders that immunisation is now due are sent out.

4. On the return of a completed record card, it is inserted into its place in the appropriate card index which becomes the register of vaccinations and immunisations completed.

5. If the returned record card is in respect of a child whose name appears in the index mentioned in paragraph 1, above, the card in that index is now destroyed.

6. In the event of no record card being returned, the card referred to in paragraph 1, above, becomes a unit in the index of those not vaccinated, or not immunised as the case may be.

7. Before placing a card in the index of the unprotected, every effort is made to persuade the parents to have the appropriate procedures carried out.

8. At all times, the Health Visitors endeavour to convince the parents of the children visited that vaccination and immunisation are necessary and should be carried out up to time.

In respect of the vaccination of older persons, a completed record card is placed in the register index on receipt.

PREVENTION OF ILLNESS, CARE AND AFTER CARE.

At the end of 1948, the position prior to 5th July, 1948, had not been changed, as the Medical Officer of Health continued ad interim the duties of Clinical Tuberculosis Officer, and Superintendent of the Fever Hospital.

Tuberculosis.

Notifications in 1948.

		Respiratory	Non-Respiratory	Total
Adults	- male	23	3	26
	- female	18	10	28
Children	- male	-	5	5
	- female	-	6	6
Total		41	24	65
Admissions to Hospital.				
Adults	- male	15	1	16
	- female	11	3	14
Children	- male	-	2	2
	- female	-	2	2
Total		26	8	34
Discharges.				
Adults	- male	14	-	14
	- female	9	3	12
Children	- male	-	1	1
	- female	1	-	1
Total		24	4	28
Deaths.				
Adults	- male	8	-	8
	- female	8	1	9
Children	- male	-	-	-
	- female	1	1	2
Total		17	2	19

Dispensary Attendances.

Consultations	244
A.P. Treatments	165
Total Attendances	409
X-ray Examinations	140

The Comments in the last Report concerning the examination of contacts and the proper housing of cases still hold good, though substantial progress has been made in the latter.

CONTROL OF INFECTIOUS DISEASE.

Notifications during 1948.

	Notified	Removed to Hospital
Scarlet Fever	110	87
Diphtheria	-	-
Erysipelas	11	9
Acute Primary Pneumonia	59	48
Acute Influenzal Pneumonia	1	1
Cerebrospinal Fever	-	-
Dysentery	10	4
Enteric (Typhoid)	3	3
Puerperal Pyrexia	5	5
Ophthalmia Neonatorum	-	-
Acute Anterior Poliomyelitis	13	13
	212	170

Commentary.

Scarlet fever of a very mild variety was moderately prevalent. With antitoxin and penicillin it is far less of a medical and economic problem than it used to be.

The pneumonias have been rather less prevalent, perhaps due to the milder climatic conditions of 1948.

Cerebrospinal fever has been absent for over two years. It is a condition with an ill defined periodicity, and its absence may herald increased prevalence in the near future. Most cases of suspected meningitis have received sulphonamides before admission to hospital. This makes the recovery of organisms, and therefore the diagnosis, very difficult.

Dysentery was of average prevalence.

Enteric fever, true Typhoid, occurred in three cases in a localised outbreak. The source was traced and rendered innocuous. This outbreak had nothing to do with the fairly severe one which occurred simultaneously in the West of Scotland.

Puerperal pyrexia cases occurred in numbers similar to those experienced in recent years.

Acute anterior poliomyelitis was notified with rather less than one quarter of the frequency of the previous year. None of the cases was fatal nor did serious paralysis occur. If there had not been such a severe outbreak the previous year, I doubt if many of these cases would have been recognised. At the same time, it seems probable that there were more cases than have been notified. There certainly was a group of cases which, on reflection, I deem to have been poliomyelitis, but in which the symptomotology was not straightforward. All presented some degree of vertigo, with more or less unsteadiness of gait. Three of these cases were notified. Two had pathological cerebrospinal fluid, and the third had transient palsies.

Recent work suggests that the onset of paralysis may be associated with muscular and nervous fatigue of the individual. It seems certain that a severe degree of paralysis will not develop in one who rests in bed from the onset of symptoms. Unfortunately, the onset of symptoms is often accompanied by an obstinate resolution to carry out a programme or project in face of the dictates of reason or the advice of others, and severe or fatal paralysis may thereby result. If I were again faced with the problem of the 1947 outbreak, my advice to the public would be "stay put", rest, and go to bed if they do not feel well, however slight the illness may be.

Diphtheria was absent. Only five years previously, in 1943, there were 86 cases, and 65 cases in 1944. Diphtheria as a disease has been locally banished, but not necessarily the diphtheria bacillus. Only the continued attention to timeous immunisation can preserve the present happy state of affairs. This depends firstly on the parents, secondly on the family doctor, and lastly on the Health Authority. I should like to pay a tribute to the very valuable work done by the family doctors of Moray and Nairn in furthering diphtheria immunisation.

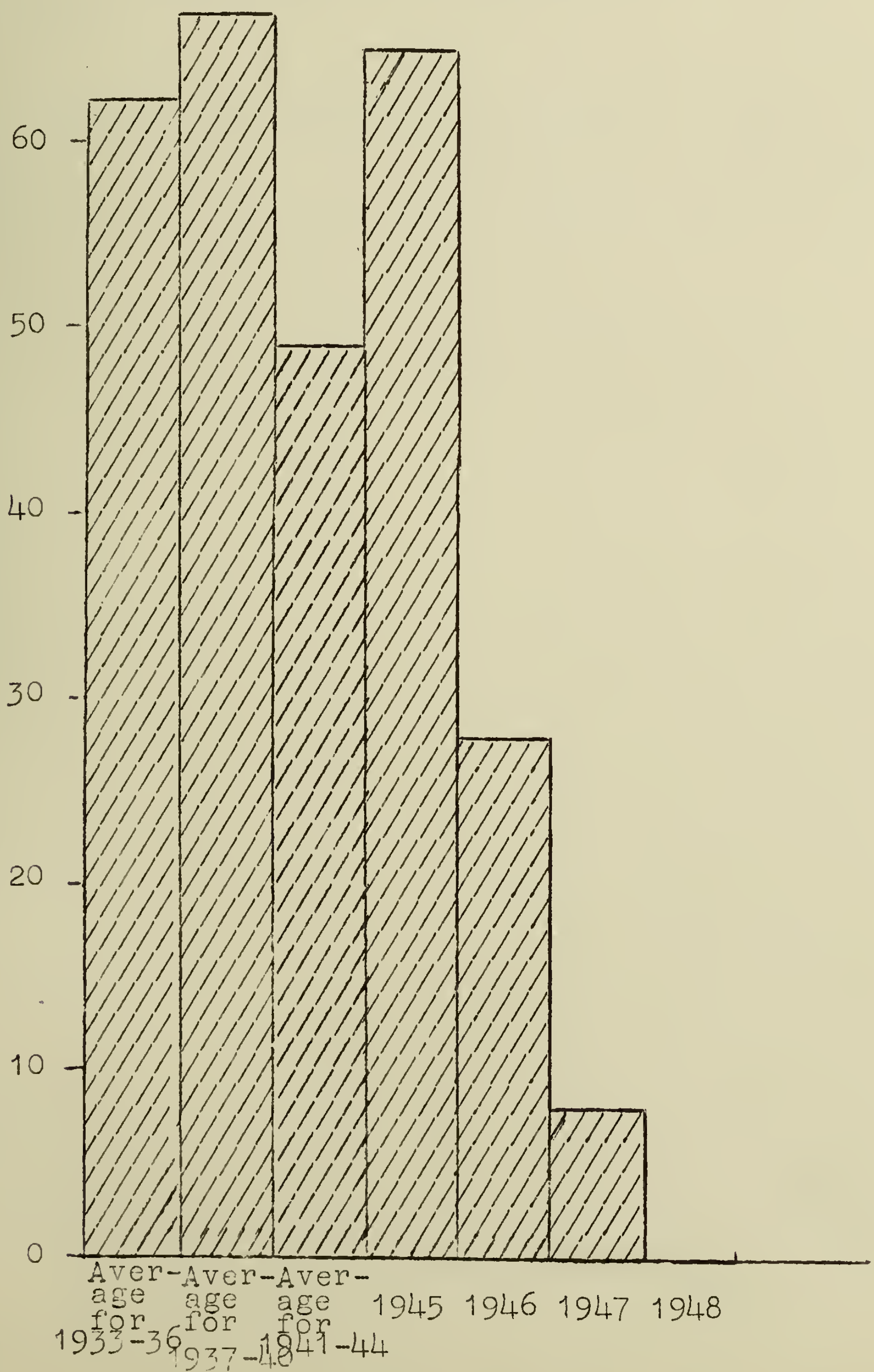
Results of Diphtheria Immunisation.

In view of the fact that 1948 proved to be the first year in which no case of diphtheria was notified, an evaluation of the immunisation scheme is included here.

Firstly, an average of cases for the pre-immunisation years will be struck. Secondly, the incidence in the years from 1941 on will be compared with this average, and the saving in notifications estimated. Thirdly, an attempt will be made to convert this saving into a cash equivalent.

The average of notifications is best demonstrated graphically and the diagram which follows immediately should be studied in connection with this paragraph.

Notifications of Diphtheria.



From this diagram it will be seen that notifications in the years 1933 to 1936 averaged 62, and in the years 1937 to 1940 67. The average of the period 1933 to 1940 was therefore 64.5. Immunisation commenced in 1941, and the average of notifications for the years 1941 to 1944 was 49. In these years, there was, therefore, a saving of 62 cases of diphtheria. In 1945, a year which the previous experience indicated as likely to be signalised by a high prevalence, there were 65 cases, or 0.5 above the average. In 1946, the cases numbered 28, a saving of 36.5, and in 1947 the cases numbered 8, a saving of 56.5, and in 1948 there were none, a further saving of 64.5. The total estimate of cases avoided is, therefore, 219.

The conversion of cases avoided into a financial equivalent is not easy. No one will deny, however, that 219 cases would have cost a very substantial sum. Not only would they have required treatment in hospital and have accounted for a proportion of the expenses of providing and maintaining hospital buildings, fuel and power, catering, staff salaries, and drugs and dressings, but also they would have added considerably to the work of the medical staff in the follow-up of contacts and of the sanitary staff in supervising disinfection. I have, therefore, chosen an average figure per head which is below the cost of each case of diphtheria notified but which does not merely represent the additional hospital charges for feeding and maintenance. In round figures, I estimate that each case saved represents a financial credit of £20, and the 219 cases which did not occur represent a saving of £4380.

It is satisfactory to record that deaths have fallen from an average of 2.75 per annum from 1933-1940 to 1.75 for the period 1941-1944, 1 death in 1946, and none since. It would appear, therefore, that 12 fatal cases have been avoided. This must also represent a substantial financial saving, but I am not prepared to put a price on human life.

MENTAL HEALTH SERVICES.

The arrangements outlined in previous Reports, concerning the disposal of cases of mental disease, continued to be operated after 5th July, 1948. The Welfare Officer acts as an official of the Health Committee, for the removal of lunatics, on behalf of the Regional Hospital Boards.

Cases in Mental Hospitals, 1948.

At 1:1:48	229
Admitted	51
Discharged	28
Died	17
At 31:12:48	235

Boarded out lunatics.

A total of 20 cases were under supervision in their own homes, or under guardianship during the year.

Mentally defectives.

A total 12 adult defectives were under supervision in their own homes, or under guardianship during the year.

A total of 8 were accommodated in licensed houses.

Child mentally defectives in institutions were as follows:-

	Educable	Ineducable
At 1:1:48	7	5
Admitted	1	-
Discharged	1	-
Reached the age of 16 yrs.	3	2
At 31:12:48	4	3

VENEREAL DISEASES.

New Civilian Cases Admitted to Clinics in Aberdeen, 1948.

Syphilis			Chan-croid	Gonorrhoea			Other Venereal condtns.	Total Vener-eal	Non Vener-eal
Acquired	Congen-ital	Total		Gen-ital	Ophthal-mia	Total			
9	3	12	1	1	-	1	5	19	9

Particulars of In-patients, and of Out-patient Attendances.

No. of In-patients	Days in Hospital	Out-patient Attendances
15	279	146

Drugs supplied to Doctors.

Doses supplied	Doctors supplied
441	12

Laboratory Findings.

Syphilis								Gonorrhoea Smears		Total
Wassermann		Laughlen		C.S.F.		Spirochaetes				
+	-	+	-	+	-	+	-	+	-	
41	227	47	222	1	12	2	5	8	90	655

LABORATORY SERVICES.

During 1948, the following examinations were made:-

	1948	1938
Bacilliary Dysentery	115	66
Weil's Disease	1	-
Undulant Fever	30	19
Glandular Fever	2	-
Amoebic Dysentery	1	-
Tuberculosis	373	196
Venereal Diseases	656	481
Diphtheria	357	977
Enteric and Food poisoning	104	61
Puerperal Fever	3	-
Biochemical	138	34
Haematological	300	-
General	1,200	1,163
Animal Inoculation	40	29
Water	163	27
Milk	1,621	64
	5,094	3,110

It is interesting to make a comparison with ten years earlier. The most striking feature is the great advance in the examinations of milk and water, the former being twenty-five times as numerous, and the latter five times. This reflects the added interest in securing safety in these two essentials of daily life.

On/

On the more purely medical side, the examinations for tuberculosis are doubled, indicating a greater awareness of the need to find cases; and the examinations for diphtheria have dropped to one third, indicating that throat conditions resembling diphtheria are of diminished frequency.

The increased examinations for venereal diseases indicate the persistence of the wartime increase in prevalence.

PORT HEALTH ADMINISTRATION.

Fourteen foreign ships engaged in home trading visited Lossiemouth and Burghead in 1948. No action fell to be taken under the Port Sanitary Regulations (Scotland), 1933-1945. No ships were fumigated and no certificates in connection with deratisation were issued.

One aircraft from a foreign airfield landed at Lossiemouth during 1948, and no action was necessary under the Public Health (Aircraft) Regulations (Scotland), 1946.

FOOD SUPPLIES.

1. MILK.

In January, 1948, the newly appointed Milk Officer took up duty. Her main duty is the sampling of milk, and advising over dairy methods.

The inspection of dairy premises has been carried out by the Sanitary Inspector.

Details of work done are contained in the Annual Report of the County Sanitary Inspector, and need not be repeated here. It is, however, particularly satisfactory to note that progress has been made in supervising school milk, both by sampling, and by ascertaining how it is handled after delivery.

2. ICE CREAM.

Details of the administration of the Ice Cream (Scotland) Regulations, 1948, are contained in the Report of the County Sanitary Inspector, who has been appointed by the Local Authority to carry out their duties. Up to the end of 1948, no case of infectious disease, or suspected infectious disease had been brought to the notice of the Medical Officer of Health. Similarly, no sampling of ice cream for bacteriological examination had been undertaken.

3. MEAT AND OTHER FOODS.

Meat inspection is undertaken at the slaughterhouses at Elgin, Forres, Grantown-on-Spey, and Nairn. The Local Authority's Veterinary Officers carry out the work. Details of condemnations are listed in the County Sanitary Inspector's Report.

Duties in connection with the Food and Drugs Act, and unsound food are undertaken by the County Sanitary Inspector, who has included details in his Report.

4. FOOD POISONING.

I am not aware that any outbreaks of food poisoning occurred in Moray and Nairn in 1948. Experience of this condition suggests to me that the Medical Officer of Health only hears of minor outbreaks by chance. Information concerning major outbreaks may or may not be transmitted promptly to him, and he is often at a disadvantage as a result. Consideration should be given to making the condition notifiable, as it is in England and Wales.

5. NUTRITION.

The nutritional state of the community appears to be reasonably satisfactory.

MISCELLANEOUS.

1. Nursing Homes Registration (Scotland) Act.

One registered nursing home is operated in the Combined County, and satisfactory standards have been maintained.

2. Health Education.

No specific action has been taken in connection with health education, but every opportunity has been taken by the nurses in the service of the Local Authority, and by school teachers, to direct attention to health problems and their solution.

GENERAL SANITATION.

Water supplies, drainage, cleansing, refuse disposal, and offensive trades are largely dealt with by the Sanitary Inspectors of the County and Burghs, and need little comment here.

Water Supplies have been maintained in a satisfactory state of purity and in fairly satisfactory quantities. Several of the Authorities are investigating the possibilities of new supplies, or of augmenting the old. If the area of the Combined County is to progress and prosper as it should, the early fruition of these schemes is to be hoped for.

Drainage Schemes, new or in augmentation of old, were in various stages of preparation. In an area as thickly populated as the Laich o' Moray and the corresponding portion of Nairnshire, the problem of safe sewage disposal becomes steadily more acute. In one case during the year, I had reason to suspect that poliomyelitis might have been spread by a burn which received the effluent of a septic tank, and lower down was used as a water supply.

Cleansing and Refuse Disposal.

I am not entirely satisfied that enough progress has been made in connection with the points raised in connection with Cleansing and Refuse Disposal in my Report for 1946 (p: 17). I suggest that, where this has not already been done, Town Councils should consider the framing of By-laws to control Cleansing and Refuse Disposal.

HOUSING.

The housing problem remains one of great acuteness. In spite of all that has been done, there are between 2,000 and 3,000 families in need of housing or re-housing. The present local annual output is of the order of 250. There are therefore now awaiting houses, people who will not secure them till 1960. Some of these may well have made application ten years ago. Some of the Housing Authorities in Moray and Nairn foresee that in the near future they will be unable to continue building, owing to the mounting cost. The development of new and cheaper methods of construction appear, therefore, to offer a very fruitful field of endeavour to those with inventive minds.

The aim of re-housing is primarily the provision of a healthy cradle for our race. The need for the re-housing of the individual family must, therefore, be assessed in terms of the degree of unfitness or overcrowding. In addition, a proportion of/

of new houses should be set aside to meet the immediate needs of ill-health, and the allotting of such houses should be in the hands of the Medical Officer of Health. The chief need is for houses for cases of tuberculosis, but there are many other conditions which warrant re-housing as an urgent measure. The several Housing Authorities pay some attention to health, and the bulk of cases of tuberculosis have been re-housed. None of the Housing Authorities has, however, separated the allotment of a house on health grounds from sanitary needs, with the result that the needs of the sick or handicapped can only be met if coupled with insanitary living conditions.

APPENDIX
(i)

Table of Causes of Death

Cause	1948	1947	Average 1941-46	Average 1931-40
Typhoid Fever	-	-	-	0.4
Cerebrospinal Fever	1	-	0.67	1.0
Scarlet Fever	-	-	0.17	2.3
Whooping Cough	1	-	1.5	2.8
Diphtheria	-	-	1.67	2.4
Tuberculosis, Respiratory	17	19	14.67	17.8
" ; Non-respiratory	2	5	6.8	6.7
Syphilis	-	1	2.3	-
Influenza	2	4	4.34	14.9
Measles	-	-	0.83	1.8
Other infectious disease	3	9	3.8	2.8
Cancer, malignant tumours	113	78	100.8	86.6
Tumour, non-malignant	1	-	2.0	-
Acute Rheumatism	-	1	1.5	-
Diabetes Mellitus	5	4	7.5	6.9
Other general diseases	11	13	11.0	16.1
Meningitis, Disease of spinal cord	2	-	4.5	-
Cerebral haemorrhage	90	95	101.67	90.8
Other disease of nervous system	8	9	15.2	20.5
Heart Disease	191	199	169.8	139.0
Other circulatory diseases	11	26	17.3	23.0
Bronchitis	13	10	18.0	26.5
Pneumonia	25	24	21.5	32.4
Other respiratory diseases	12	12	10.0	11.9
Gastric and duodenal ulcer	4	6	8.2	6.5
Diarrhoea (all ages)	3	4	4.0	7.7
Appendicitis	2	-	3.34	4.8
Cirrhosis of liver	2	3	1.34	1.6
Other diseases of liver	1	4	2.8	3.6
Other digestive diseases	10	15	13.0	12.2
Nephritis, acute or chronic	15	16	14.5	16.3
Other diseases of genito-urinary system	7	9	11.5	12.5
Puerperal sepsis	-	-	1.67	0.8
Other puerperal causes	1	3	2.0	3.4
Diseases of skin and movement	2	1	2.5	3.7
Congenital debility, premature birth, malformations	41	43	37.2	35.2
Old age	6	13	31.7	43.1
Suicide	3	6	3.0	3.8
Road transport accidents	11	6	8.0	-
Other violence	35	16	19.2	15.0
Ill defined or unknown	7	17	10.9	9.0
TOTAL	658	671	700.0	685.8

Distribution of Cases

	County of Moray	Burgh of Elgin	Burgh of Forres	Burgh of Grantown	Burgh of Lossiemouth	Burgh of Rothes	Burgh of Burghead	County of Nairn	Burgh of Nairn	Total
Scarlet Fever	49	28	11	1	11	2	-	5	3	110
Diphtheria	-	-	-	-	-	-	-	-	-	-
Erysipelas	6	4	1	-	-	-	-	-	-	11
Acute Primary Pneumonia	26	18	-	-	7	5	-	-	3	59
Influenzal Pneumonia	-	1	-	-	-	-	-	-	-	1
Cerebrospinal Meningitis	-	-	-	-	-	-	-	-	-	-
Poliomyelitis	5	5	-	-	1	-	-	1	1	13
Dysentery	8	1	-	-	1	-	-	-	-	10
Paratyphoid B.	-	-	-	-	-	-	-	-	-	-
Typhoid	3	-	-	-	-	-	-	-	-	3
Puerperal Pyrexia	3	1	-	-	-	-	-	1	-	5
Ophthalmia Neonatorum	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-
Pulmonary Tuberculosis	15	9	2	3	3	2	1	3	3	41
Non-pulmonary Tuberculosis	10	5	2	1	1	1	1	2	1	24
TOTAL	125	72	16	5	24	10	2	12	11	277

Seasonal Incidence

	Scarlet Fever	Diphtheria	Erysipelas	Acute Primary Pneumonia	Influenzal Pneumonia	Cerebrospinal Meningitis	Poliomyelitis	Dysentery	Paratyphoid B.	Typhoid	Puerperal Pyrexia	Ophthalmia Neonatorum	Malaria	Pulmonary Tuberculosis	Non-pulmonary Tuberculosis	Total
January	17	-	-	9	1	-	-	6	-	-	1	-	-	2	1	37
February	7	-	2	5	-	-	1	-	-	-	-	-	-	2	1	18
March	8	-	2	4	-	-	2	1	-	-	2	-	-	4	2	25
April	8	-	1	7	-	-	1	1	-	-	-	-	-	3	4	25
May	15	-	-	4	-	-	-	-	-	-	1	-	-	1	2	23
June	15	-	1	2	-	-	-	1	-	-	1	-	-	4	-	24
July	5	-	1	3	-	-	1	-	-	-	-	-	-	1	-	11
August	3	-	-	3	-	-	-	-	-	3	-	-	-	4	3	16
Sept.	1	-	-	4	-	-	4	1	-	-	-	-	-	2	2	14
Oct.	8	-	-	5	-	-	3	-	-	-	-	-	-	7	3	26
Nov.	9	-	2	9	-	-	1	-	-	-	-	-	-	8	2	31
Dec.	14	-	2	4	-	-	-	-	-	-	-	-	-	3	4	27
TOTAL	110	-	11	59	1	-	13	10	-	3	5	-	-	41	24	277

Age Incidence and Number of Removals to Hospital.

	All ages	Under 1	1 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 64	65 and over	To Hospital	Not to Hospital
Scarlet Fever	110	-	23	77	8	-	1	-	1	87	23
Diphtheria	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	11	-	-	-	1	2	1	3	4	9	2
Acute Primary Pneumonia	59	13	8	5	5	2	5	12	9	48	11
Influenzal Pneumonia	1	-	-	-	-	1	-	-	-	1	-
Cerebrospinal Meningitis	-	-	-	-	-	-	-	-	-	-	-
Poliomyelitis	13	1	1	6	-	4	1	-	-	13	-
Dysentery	10	-	-	3	1	1	3	2	-	4	6
Paratyphoid B.	-	-	-	-	-	-	-	-	-	-	-
Typhoid	3	-	-	-	-	2	1	-	-	3	-
Puerperal Pyrexia	5	-	-	-	1	3	1	-	-	5	-
Ophthalmia Neonatorum	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-
Pulmonary Tuberculosis	41	-	-	-	15	17	4	4	1	25	16
Non-pulmonary Tuberculosis	24	-	2	9	4	3	1	4	1	7	17
TOTAL	277	14	34	100	35	35	18	25	16	202	75